RECEIVED

J.: 13 1981 L. E.P.A. - D.L.P.C. STATE OF ILLINOIS

June 29, 1981



RECEIVED JUL 06 1981

Mr. Thomas E. Cavenaugh, Jr., Manager Residual Management Section Division of Land/Noise Pollution Control Illinois Environmental Protection Agency 2200 Churchill Road Springfield, Illinois 62706

E.P.A. — D.L.P.C. STATE OF ILLINOIS

SUBJECT: SUPPLEMENTARY INFORMATION FOR PAP DEVELOPMENT PERMIT REAPPLICATION; D.E.MATSCHKE COMPANY FILE NO. 1042.001

Dear Mr. Cavenaugh:

Gene 'Thios and Rama Chaturvedi of your section made suggestions concerning the subject permit during my June 26 visit to your Springfield offices. The purpose of this letter is to follow-up on those suggestions.

Facility Description

Process Alliance Partnership (PAP) wants to take this opportunity to describe in specific terms the nature and capability of the facility that has been and will be operated in Joliet. PAP hereby requests that the scope of the applied-for development permit include these descriptions. Each of these capabilities has been PAP Joliet demonstrated either in full or laboratory scale. Each specific source of waste stream has been or will be the subject of a supplementary stream permit application to IEPA.

The PAP facility has liquid and filter-cake storage; liquid and slurry tanktruck unloading and transfer; tank reactors with mixers; floatable separations; decanting transfers; sludge transfers; pH adjustments; chemical and polymer conditioning tanks, mixers and pumps; diatomaceous earth filteraid operations; dewatering operations including plate and frame filters and belt presses.

Key reagents that are or can be used are caustic soda; sodium sulfides; lime; sulfuric acid; hydrochloric acid, nitric acid; hydrofluoric acid; iron, copper, zinc, chrome, aluminum and other metallic salts.

Liquid aqueous streams that have been or can be processed by PAP-Joliet for recycle and/or disposal are spent limes or caustics; emulsified oils; spent pickle liquors, etchants and plating solutions; biological sludges; phosphorus fertilizer manufacture waste streams containing phosphorus and fluoride salts.

PAP Joliet facilities have treatment capabilities that include metallic ion deactivation by sulfide precipitation, neutralization of acidic or basic streams; demulsification of oil-water mixtures; lime precipitation of phosphorus and fluoride salts; lime stabilization of biological sludges; chemical and/or polymer conditioning of slurrys and sludges; dewatering of chemical or polymer conditioned sludges; generation of aqueous effluents acceptable to a municipal sewage treatment plant, generation of dewatered filter-cakes either acceptable to conventional, non-hazardous and special waste landfills or suitable for recycle.

Mr. Thomas E. Cavenaugh, Jr. 6/29/81 DEM Page 2

Berm Cross-Section

Exhibit A of this letter transmittal shows a typical cross-sectional view of the protective berm that lies along PAP's north property line, east of the PAP processing building. This berm together with the seawall along PAP's east property line and site topography and a natural topographic low at the nort-west corner of PAP's property will intercept potential PAP spills and prevent such potential spills from entering other adjoining property.

Thank you for the opportunity to visit with you and members of your section. I found the meetings very worth while. I am sending two copies of this transmittal to you with a copy to each of Messrs. Thios and Chaturvedi. I will follow-up with two additional copies signed by both my partner and myself, as soon as he is available.

Best wishes,

Donano E. Martusso

Donald E. Matschke, PhD,PE President

D.E.MATSCHKE COMPANY

Partner

PROCESS ALLIANCE PARTNERSHIP

Alfred M. Tenny, President

BY-PRODUCTS MANAGEMENT, INC.

Partner

PROCESS ALLIANCE PARTNERSHIP

DEM:em w/l exhibit

D.E.MATSCHKE COMPANY TWO SALT CREEK LANE HINSDALE, IL 60521 312-654-1970

PROCESS ALLIANCE PARTNERSHIP
608 RAILROAD STREET
JOLIET, ILLINOIS 60436
815-722-0900

EXHIBIT A- BEAM CASS-SECTION CAUSINED LIMISTONE RIP-RAP VENTICAL SLIDING GATE METAL CULVEYT PIPE WEST SECTIONIAL VIEW APPROXIMATELY 65 FEET FROM CONSPETE PIVER WALL ? GATE SHOWN IN PASTITUTY OPEN POSITION AS WHEN PLLIEVING STORMWATTER ONE INCH ANGLES WELDED TO END OF CULVERY PINE, EXICTION AND SNUG FIT WITH GATE SOUTH ELEVATION NOTE: BEAM HEIGHT VARIES FROM 3 FEET AT EAST END TO 11/2 FEET AT WEST END. CTHER DIMENSIONS VARY ACCORDINGLY. DEMC, 1042.001, 6/29/81